903-11 Angioplasty in Acute Myocardial Infarction in Clinical Practice: Results In 4625 Patients From the ALKK Angioplasty Registry

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Angioplasty (A-AMI) has shown to be an effective therapy in patients (pt.) with acute myocardial infarction (AMI). However, numbers of pt. treated with A-AMI are still small and little is known about the use of A-AMI outside highly specialized centers. We therefore analyzed the data of the angioplasty registry of the ALKK, a group of non university hospitals in Germany. Between 10/92 and 12/95 a total of 81724 angioplasties were registered, including 4625 (5.7%) A-AMI. There were 75.1% men and the mean age was 61 ± 11 years (21–89 y). Total occlusions of the infarct related artery were present in 3259 (70.5%) and a stenosis ≥90% in 874 (18.9%) pt. Technical success rate, defined as stenosis after A-AMI < 50% was 86%, and 5% showed a residual stenosis of ≥50% and <90%. Additional thrombolysis was given in 417 (9%) pt. and stents were implanted in 443 (9.6%) pt. Bypass surgery following PA was performed in 139 (3%) pt. Total hospital mortality was 9.6% (438 pt.). There was a higher mortality in hospitals performing ≤ 40 A-AMI/year as compared to those with >40 A-AMI/year (11.4% versus 8.1%, OR = 1.59, 95% CI = 1.30–1.95). *Conclusion:* In clinical practice A-AMI can be performed with a high procedural success rate. Mortality in this multi-center registry was similar to that reported by large single center registries.

903-12 Discrepancy Between Actual vs. Potential Treatment in Acute Myocardial Infarction: Use of Thrombolytics, Aspirin, Beta-blockers and ACE-inhibitors in Germany 1996. MITRA Study

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The aim of this study is to document actual clinical practice (pilot-phase) and to improve the therapy of acute MI individually according to published recommendations. In the study phase, we used an educational program for participants. They were advised to consider only major contraindications for each prognostically important drug.

MITRA is a german registry of 54 hospitals in the Southwest. The total pts. group consisted of 4178 patients with proven q-wave myocardial infarction. Patients were documented consecutively and were enrolled even up to 96 hours after onset of symptoms. Median age was 66 years, prehospital delay 2.7 h, anterior MI 48%, previous infarction 17.4%.

	Pilot-phase (n = 1303)			Study phase (n = 2875)		
	Pts. without contraindic. (%)	Pts. actual treated n	(%)	Pts. without contraindic. (%)	Pts. actual treated n	(%)
Thrombolysis	86.6	602	53.4	79.1	1373	60.4
Aspirin	99.7	1138	87.6	99.3	2724	95.4
β-Blocker	84.0	406	37.1	82.6	1543	65.0
ACE-inhibit.	86.7	197	17.4	84.6	1559	64.1

Primary PTCA increased from 6.3% (pilot) to 11.4% (study phase).

Conclusion: Pharmacological therapy in acute MI is inconsistent with the recommendations of recent clinical trials as documented in the pilot phase. An individually optimized therapeutic concept, which considers only major contraindications for each drug improves infarction therapy particularly for beta-blocker and ACE-inhibitor.

904 Stents: Difficult Lesion Subsets

Sunday, March 16, 1997, 5:00 p.m.–7:00 p.m.
Anaheim Convention Center, Hall E
Presentation Hour: 5:00 p.m.–7:00 p.m.

904-25 Unprotected Left Main Stenting: Preliminary Results and Follow-up with the First 41 Patients

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Unprotected left main coronary artery (LMCA) angioplasty has been associated with a high procedural complication rate and short-term mortality. The availability of stents and their success in reducing acute complications and restenosis may cause to re-examine the role of PTCA for LMCA disease.

Unprotected LMCA stent implantation was performed electively in 41 consecutive patients (pts) included 20 poor candidates (group 1) and 21 good candidates for CABG (group 2). Clinical data were in group 1: 15 males, mean age of 70 ± 7 years, 10 pts with unstable angina (UA), mean LVEF of 47 ± 15%, 13 pts with prior cardiac surgery and in group 2: 17 males, mean age of 68 ± 11 years, 11 pts with UA, mean LVEF of 64 ± 11%. All pts were treated with Ticlopidine (2 × 250 mg daily) started 3 days before PTCA. Indications for stenting were elective for 39 pts and dissection for 2 pts. Angiographic success was achieved in all pts with 54 stents (38 Palmaz-Schatz, 7 Gianturco-Roubin, 5 Saint-Come, 3 AVE and 1 Multi-Link stents). PTCA of 42 other vessels (including 9 right coronary artery) were also done with 7 other stent implantations. Two subacute thrombosis occurred during hospital stay in group 1, involving 2 deaths (4.7%). No cardiac event occurred in group 2. Clinical follow-up was available in all pts (mean interval of 13 ± 10 months) as follow: 1 death in group 1, repeat LMCA PTCA for angina recurrence in 3 pts (17%) of group 1 and in 1 pt (5%) of group 2. *Conclusion:* Unprotected LMCA stenting with a Ticlopidine regimen can be considered as a safe and effective percutaneous intervention in selected pts. Nevertheless randomized trials LMCA stenting versus surgery are necessary in good candidates for CABG.

904-26 Stenting of "Unprotected" Left Main Coronary Artery Stenoses: Early and Late Results

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Background: Transluminal angioplasty of "unprotected" left main coronary artery (LMCA) stenosis is still considered to be contraindicated even in the age of stenting.

Objectives: We reviewed the results of coronary stent (S) implantation in "unprotected" LMCA stenosis in 18 consecutive patients (10 elective procedures, 8 acute procedures) to asses short and long-term effectiveness of this procedure.

Population: Mean age was 70.8 years (range 38 to 91). Twelve men. Fourteen pts had normal left ventricular function. Seven patients had only a significant lesion in the LMCA.

Results: Successful S-implantation was achieved in all patients with a maximum balloon inflation pressure of at least 16 atmospheres and a mean maximum balloon size of 4.3 mm. Six pts underwent additional angioplasty of other stenoses during the procedure. No major cardiac events (acute myocardial infarction, cardiac death, coronary artery bypass surgery, repeat angioplasty) occurred during the procedure in the elective group. In the emergency group, one pt died, one pt underwent emergency coronary artery bypass surgery, one pt developed a non q wave myocardial infarction. During hospital stay, one pt underwent a repeat angioplasty in the elective group, and one pt in the emergency group died suddenly. Follow-up was obtained in all surviving pts, at a mean interval of 9 months, there were 2 non related death; one pt had class 2 angina and 12 pts had no symptoms.

Conclusion: We conclude that stent implantation in "unprotected" LMCA stenosis using high pressure for S-delivery can be considered a safe and effective coronary revascularization option in selected patients in elective conditions. The short-term prognosis in emergency situations remains poor.

904-27 Stent Implantation After Successful Balloon Angioplasty of a Chronic Coronary Occlusion – A Randomized Trial

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The restenosis rate after angioplasty for chronic total coronary occlusion is much higher compared to coronary stenoses. The benefit of stent implantation in this situation is unknown.

80 Patients were randomized after successful balloon angioplasty of a chronic coronary occlusion to "stent" implantation or to "no stent." The baseline characteristics of both groups showed no difference. Follow-up angiogram was performed after 4 months or earlier if necessary for clinical reasons.

	No stent	Stent	p
MLD (mm)	1.75	2.69	< 0.001
%Stenosis	21.6	5.8	< 0.001
Reocclusion (%)	12	0	n.s.
Restenosis >50%	64	28	< 0.05
Re-PTCA or CABG (%)	52	24	< 0.05
MLD 4 months (mm)	0.95	1.85	< 0.01
% Stenosis 4 months	61	33	< 0.01